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(54) A charge storage device

(57) The storage elements (3) of an array (2) are arranged in rows and columns with the storage elements (3) in a column being coupled to a first conductor (4) and the storage elements (3) in a row being coupled to a second (5) and to a third (6) conductor. Each storage element (3) in a row is coupled to the associated second conductor (5) by a first rectifying element (D1) and to the associated third conductor (6) by a second rectifying element (D2) with the first and second rectifying elements (D1 and D2) allowing the passage of current when forward-biased by applied voltages. The third conductors (6) also form the second conductors (5) of any adjacent rows. The first and second rectifying elements (D1' and D2') of alternate rows (N, N+2, N+4, ...) are oppositely oriented to those (D1'' and D2'') in the remaining rows (N+1, N+3, ...). An arrangement (7) is provided for applying voltages to the second and third conductors (5 and 6) for enabling only the first and second rectifying elements (D1 and D2) associated with a selected row of storage elements (3) to be forward-biased to allow charge stored at the storage elements of the selected row to be read. This allows the problems of incomplete recharging of storage elements (3) to be reduced without having to increase the overall number of conductors.

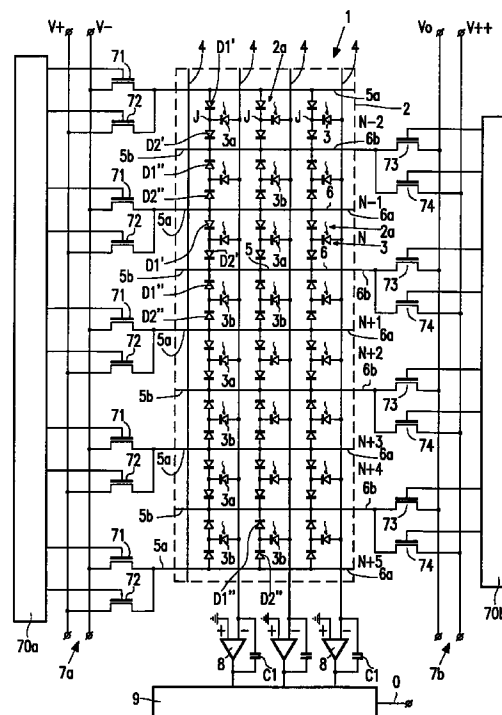


FIG. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 95 20 0469

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP-A-0 324 677 (THOMSON CSF) 19 July 1989 * claims 1,2,6,9; figure 6 * ---	1-6,8-10	H04N3/15
D,A	EP-A-0 233 489 (OVONIC IMAGING SYSTEMS INC) 26 August 1987 * column 8, line 22 - line 46; figure 1 * -----	1-6,8-10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			H04N
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19 December 1995	Examiner Montanari, M
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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